DOCUMENT RESUME

ED 439 445 CS 510 253

AUTHOR	Erland, Jan
TITLE	Building a More Powerful Brain.
PUB DATE	2000-00-00
NOTE	7p.
PUB TYPE	Opinion Papers (120)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*Brain; Careers; *Cognitive Development; Cognitive Style; Self Actualization; *Skill Development; *Thinking Skills; Training Methods
IDENTIFIERS	Cognitive Capacity; *Cognitive Strategies; Training Effectiveness

ABSTRACT

Technically speaking, brain building is called cognitive skill development and has been in the psychology domain since the early 1960s. Historically, cognitive skill improvement was isolated within progressive coastal school districts and psychologists' private offices. Cognitive skill improvement was used successfully as a treatment in these arenas for learning and even psychological problems. Unfortunately its use as a training tool was ignored, in spite of obvious workplace implications. One learning disability specialist who conducted many field tests with corporations and over a thousand students made some interesting discoveries: individuals can modify or add to their existing learning style inventory, and each person has a unique mental profile with high and low areas. Knowledge of personal strengths and weaknesses gives a person the power to match himself/herself with the demands of potential careers and their skill requirements. Different careers require different skill sets, some more analytical, some more verbal, some more spatial, or organizational. Self-knowledge not only translates into better work proficiency, but also higher income and self-actualization. There are many simple exercises individuals can try, which are based upon formal measurements. Many other games and checklists for assessing right- and left-brain dominance are on the market in bookstores. An individual's ability to organizing or sequencing information is fundamental to office and work management. The best thing people can do for themselves is determine what their strengths and weaknesses are. (NKA)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 439 445

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Building a More Powerful Brain

By Jan Erland

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
J. Erland
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Building Intellectual Capital, for ourselves and the company we work for, is one of the most important things we can do to get ahead. Mental enhancement not only facilitates peak performance, but it also empowers us to go anywhere and do anything with authority and conviction. Cognitively enabled employees have the necessary skills, knowledge, and ability to do their jobs. Unfortunately, few of us realize brain building is possible, or how to begin.

Technically speaking, brain building is called cognitive skill development and has been in the psychology domain since the early 1960s. J. P. Guilford, eminent professor at University of Southern California, and a President of The American Psychological Association, designed the "Structure of Intellect", winning several prestigious awards for it. This intellectual model consisted of a cube of 126 different mental abilities. See J. P. Guilford & R. Hoepfner, 1971, "The Analyses of Intelligence" New York: McGraw Hill; R. J. Sternberg, 1991, "Competence Considered," and 1992, "Intellectual development," both Cambridge, MA: Yale University Press.

Historically, cognitive skill improvement was isolated within progressive coastal school districts and Psychologists' private practices. Cognitive skill improvement was used successfully as a treatment in these arenas for learning and even psychological problems. Unfortunately, its use as a training tool was ignored, in spite of obvious work place implications.

Most of us do not like to admit we have trouble processing information. We may feel insulted, and even become defensive at the very thought. However, we do not have to feel self-conscious about this type of self-improvement. Each of us is a unique individual, and information processing can vary

CS 510 253

BEST COPY AVAILABLE

across a considerable range from person to person. However, where possible, each of us should seek to optimize our mental abilities. Think of your mind as a valuable core aspect of your ability to be productive. Consider shaping it up, as you would fine-tune the engine of a sports car.

Many, becoming aware that a way to speed up information processing exists, become enthusiastic about personal advancement and heightened work efficiency. It all boils down to getting more work done in less time, with less stress and effort.

With the technical demands of the new century, and the elimination of training jobs because of new technologies, we should strengthen our brains and develop our own intellectual capital bank.

The Beginning: Understanding Our Brain Foundation.

Unless our mental profiles are empirically tested, we can only guess what our individual strengths and weaknesses are. Psychologists and learning specialists are qualified to test and re-train cognitive skills on an individualized basis. However, formal testing evaluations are expensive and time consuming, so this becomes impossible for most of us.

As a learning disability specialist, I tested and trained learning problems for years. Assessing specific learning difficulties, severe cases ADD, dyslexia, and ADHD, I wondered what the typical mental profile would be, and how it related to the workplace. It soon became evident.

My clients from the general population soon included a wide array of people, from students, professionals, executives, engineers, the average employee, to athletes. I conducted many field tests with corporations and over a thousand students, as they are intact seated learning groups and do not travel on business missing training. I evaluated performance improvement change with nationally standardized cognitive skill measures and achievement tests. Although it is known we all have different learning style profiles, and there are more than fifty, I made some interesting discoveries.

We can modify or add to our existing learning style inventory. In other words, we can enhance the learning styles we have by improving our non-functional learning styles. Developing our weak or inactive learning styles is possible through training. Strong areas can be improved even further.

We each have a unique mental profile with high and low areas. Weak areas often clash with strong areas. Our information processing gets out-of-sync. Not knowing what the problems are, we simply guess, and cope the best we can. Unfortunately, anxiety and feelings of insecurity can be a by-product. Training can solve the problem and allow all the high and low areas to work together, putting our information processing memory track back in-sync.

I recently tested one of my employees, an accounting student. While she was happy to discover she had *very superior visual speed* and was overly proficient with memory for numbers, she was also dismayed she was spatially slow with visual relationships. She confessed, "It always did seem hard for me to visualize building or house plans, so I decided not to go into architecture." Fortunately, she had not made a big educational time commitment to a visual-spatial discipline.

Her deficit, discovered by testing, was born out in her daily work. She has difficulty designing spatial layout presentations for my office. Clearly, she would not be comfortable or successful in a job requiring significant layout and design requirements. She then continued, "Well, I'm glad I'm informed about this, but it isn't money in my pocket."

This is a wrong assumption. Having strong mental abilities is certainly important for work-life career success, but few people are universally competent. Therefore, knowledge of your strengths and weaknesses gives you the power to match yourself with the demands of potential careers and their skill requirements. Different careers require different skill sets, some more analytical, some more verbal, some more spatial, or organizational. Understanding your strengths can save you valuable time, frustration, and money. Such self- knowledge not only translates into better work proficiency, but also higher income potential and self-actualization.

For example, a former client, who had been labeled in school as severely Developmentally Disabled, was retrained, graduated from college, and now is an educational homebound teacher and consultant for parents in the Kansas City, Missouri school district.

Another was traded in a professional baseball club for $3.5 million in a professional baseball signing, following performance assessment and retraining he had received several years previously. Another recently won the Kansas Open golf tournament. Another, a mid-manager for a telecommunications company, at age forty, had never been promoted. He confessed it was because he was slow to encode new information. Following encoding-decoding brain building, he is now the Director of the Kansas City suburban plant. Still another shortened medical school by two years because he could handle more coursework each semester after brain training.

Are these coincidences? This is unlikely. It is obviously beneficial to empower your mental skills, which is the gray matter collateral existing above your hairline.

What Can We Do? Become Aware.

Unfortunately, testing and measurement is serious business, and can legitimately be done only by skilled professionals licensed to do so. However, there are simple exercises you can try, which are based upon formal measurements. They can give you an idea where you stand. My article, "Jazz-Up Your Short-Term Memory", received the interest of many who played the exercises and checked out their visual and listening short-term memories. (Erland, J. K., American Society For Training and Development's (ASTD) *Performance In Practice*, Summer 1998, and KC-ASTD September VISION).

Many other games and checklists for assessing your right- and left-brain dominance are on the market in bookstores. This is a good way to begin. In addition, we must realize that Short-Term visual and listening memories are the foundation of understanding and knowledge, and can be trained to work for you.

The next important piece of ammunition in the battle to process information is understanding how well you can organize or sequence information. Fundamental to office and work management, we can learn to develop the underlying skills. Unfortunately, if you can not sequence (a left-brain activity) or classify information well, you appear disorganized and confused. This does not garner respect or a promotion. Here are ways to improve your sequencing ability:

1) Read a "How-To" step-by-step computer software instructional book. Practice the new operations. Then, expand upon this knowledge.

2) Clean out a file drawer, throw away out-dated material, and re-label its contents according to better, more accessible classifications.

3) Polish your written communication skill. Develop more organized, linear thought flow.

4) Listen to the news, and practice recapping five lead stories in sequential order during dinner conversation.

5) When you give oral presentations, think ahead sequentially about what you are going to say. Do not allow information to simply "fall out" indiscriminately.

6) Learn to play a musical instrument. It consists of symbolic notations of successsive phrases.

Becoming increasingly self-aware through practice of techniques such as those listed above will lead to career and work-life success. Self-empowerment is the way to approach new beginnings. Give yourself permission to become more mentally adept.

What Happens if You Don't.

The best things you can do for yourself is determine what your strengths and weaknesses are, because if you lack brainpower in a critical job area requirement, you fall short. I have sadly witnessed individuals select career paths based upon media impressions, only to find out they lacked the spatial skills, judgement, visual and listening abilities required to perform this work on a daily basis, year after year, successfully. They are often capable enough, in a general sense, to graduate in a particular field, but they can not perform the job requirements successfully due to their mismatched abilities.

After the cost and pain of several years' school or training, they switch to a different field. Sometimes this is a smooth, happy transition, but for others, it becomes costly.

Following are examples of former clients' disappointments and how they did not realize they had hidden *visual* perceptual problems:

A vivacious teacher transferred into business training and development, but found presentation development too demanding for her weak visual memory and spatial skills.

A mechanical engineer switched to management, bringing increases in pay and status when he discovered he did not have the visual aptitude for engineering design. On a daily basis, designing had become a tedious chore.

An architect with poor visual perception switched to Real Estate, which he was not particularly suited for, either. Working with contractual detail was a chore, and he was never satisfied with what he did for a living.

After reviewing these drawbacks, carefully consider your own strengths and weaknesses and how to identify then improve them.

Jan Kuyper-Erland is Analyst and Performance Improvement Consultant for Mem-ExSpan, Inc.'s High Performance Thinking ® training, measurement and evaluation. The author can be reached email: Jan@memspan.com. www.memspan.com